CE. Taylor.

# ARTS and CRAFTS

IN

# METAL

CATALOGUE NUMBER 10

TOOLS and MATERIAL



CHANDLER & BARBER
122-126 SUMMER STREET
BOSTON, MASSACHUSETTS



THE HENRY FRANCIS du PONT WINTERTHUR MUSEUM LIBRARIES

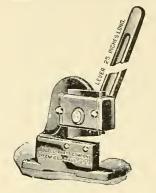
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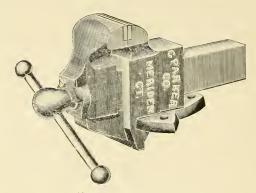
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The above cuts illustrate a few of the many articles made from our own patterns and which can be easily made from light sheet brass with few and inexpensive tools. This line of work is being taken up by a great many classes of people. The work may be simple or complex according to time, talent, or inclination. It affords a pleasant and profitable change and recreation for the student and teacher, and also for scholars who do not have such work in school. It is taught in many of our high schools and may be adopted by vacation schools, settlement work, etc.

The articles from which our cover cut was made were loaned us by Mr. Alexander Miller of the Brookline, Mass., High School and are the work of pupils in their third and fourth years. They give an idea of the quality of work being done in some of our High Schools in these lines.





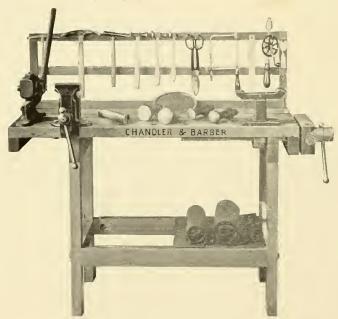
# BENCH SHEAR No. 3232

# BENCH VISE No. 890

cut with this shear, the shape of the casting being designed particularly with this end in view. It is provided with a Lever, 25 in. in length, and has a Blade, 4 in. long, opening 9-16 in. at the front.

Sheets of any width can be readily A strong serviceable vice for metal work with this shear, the shape of the Style Jaw Weight Net Price  $3\frac{1}{4}$  in.  $3\frac{5}{8}$  "  $4\frac{1}{8}$  " \$4.50 25 A 5.00 В 31 6.50 48 7.50 D 62

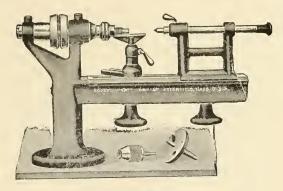
Price, each, \$15.00



# BENCH NO. 101 WITH METAL OUTFIT

No.	101.	Bench	as	cut,	4 ft.	long,	with	vise						\$14.00
4.4	101.	6.6			4 "	6.6	6.6	lighter	vise					13.00
6.6	11.	6.6	4.6	4.6	3 "	6.6		- 6	6.6					11.50
6.6	151.	4.6	4.6	6.6	4 "	6.6	6.6	6.6	6.6	also	Cabin	et t	o hold	
	tools													18.00

(Write for our Catalogue No. 9, showing Benches at all prices for individual, school or shop use.)



# POLISHING LATHE

No. 211 Price, each, \$6.00

This Polishing Lathe, complete with Tail Stock, Tee Rest, Face Plate, Saw Arbor, and Three-Jawed Chuck, capacity 0 to 5-32 in., admits of a large variety of polishing, grinding, and similar operations not possible upon the ordinary styles of plain Polishing Heads. The bed is 12 in. long and swings 5 in. on centers. Weight, 18 lbs.

# POLISHING LATHE AND BENCH

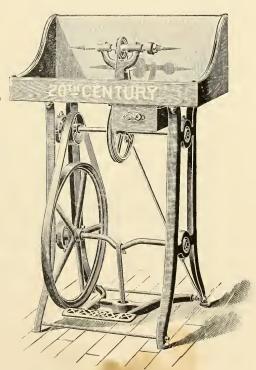
No. 2222 Price, each, \$20.00

# Felt Buffing Wheels

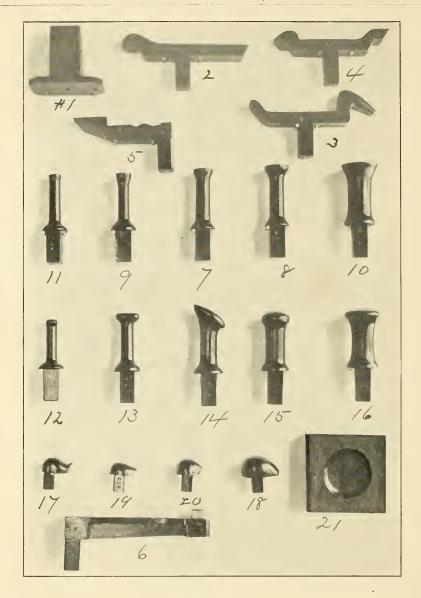
$2x_8^3$ in.	Price, each,	\$0.20
$3x^{\frac{1}{2}}$ "	4.6	.30
4x <del>7</del> "	66 66	.50
5x7 "	66 66	.75

# Walrus Buffing Wheels

$5x_{\frac{3}{4}}^{3}$ in.	Price, each	, \$0.75
$6x^{\frac{4}{3}}$ "		1.00
Carborundum	Grinding	Wheels
$3x_{\frac{1}{2}}^{\frac{1}{2}}$ in.	Price, each	, \$0.50
$4x_{\frac{3}{4}}^{3}$ "	6.6 4.6	.65
$5x_{\frac{3}{4}}^{3}$ "		.75
$6x\frac{3}{4}$ "		1.00



(Special Prices on Class Orders.)



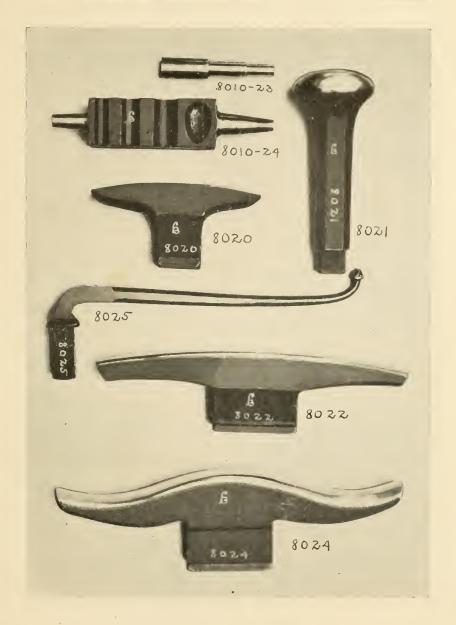
# ANVILS NO. 8010

Designed by R. H. GALLAGHER.

Mr. Gallagher was for many years an instructor at Rindge Manual Training School at Cambridge, Mass. and designed these from practical experience.

(For prices see page 7.)

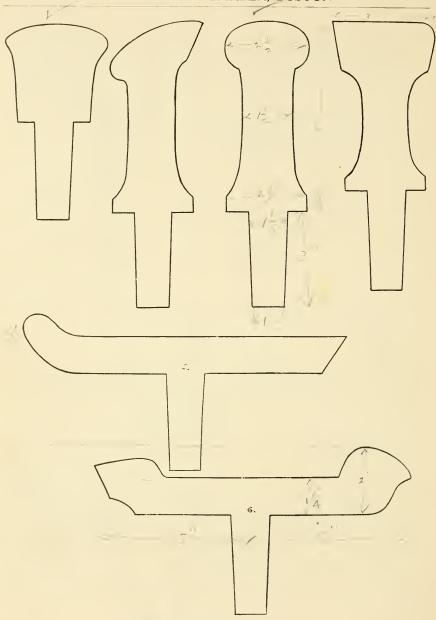
(Books on Arts and Crafts at publishers' prices.)



HEAVY ANVILS as Used by Silversmiths

These will be found useful and even necessary on the larger kinds of work. See page 7 for prices.

(Enamels in all colors in any quantity.)



ANVILS, SET NO. 7010

Designed by L. H. MARTIN and JOSEPH SANDBERG

The above outlines show a simple but effective set of Anvils on which a great variety of work may be accomplished. We have sent out hundreds of these to satisfied customers. For prices see page 7.

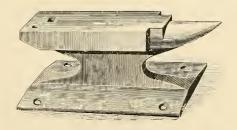
(Market Prices on Brass and Copper.)

No.	0:		
	Size		Price
<b>70</b> 10		Set of Six Anvils with Holder for use on Manual	
		Training Bench, no vise necessary. Shown on	
		page 6	\$5.00
7010		Holder only , each.	1.25
		Anvils "either shape 1-6. (Specify number)	.65
8010		Set of twenty shapes and holder, shown on page 4	13.00
	1	Holder for all shapes but 17-21	1.50
	2, 3, 4, 5	Extension Anvils each,	.75
	6	" for using shape 17-20	1.50
	7, 9, 11	Round Lop, Flat Anvils each	.50
	8		.55
	10		.65
	12, 13	Oval " " "	.50
	14, 15, 16	Three exceptionally useful shapes "	.65
	17, 18, 19, 20	Small shapes for use with No. 6	.35
	21	For Tray use mostly	1.50
	22	Cone Shape for Ring Work, not illustrated	2.00
	23	For Forming Rings and Circular Work, shown on	
		page 5	1.50
	24	page 5	
		page 5	1.50
Th	ese next five	shapes are much larger and heavier than the above.	made
especia:	lly for Silversi	miths' use. They are also most useful in School work f	or use
on large	er models. T	hey are designed for use in heavy Iron Vises.	
8020		Extension Anvil, shown on page 5	\$1.00
8021		Rounding Top, shown on page 5.	1.50
8022		Long Extension Top, shown on page 5.  " broader than 8022 .  " with Curved Surface .	2.25
8023		" broader than 8022	2.25
8024		" " with Curved Surface	3.00
8025		Solid Steel Snarling Iron	3.50
8050	A	" " Bench Anvil Face 5x11: Woht 3 lbc	1.40
	В	" " $6x2$ : " $6\frac{1}{3}$ "	1.75
	C	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2.10
		112,	2.10





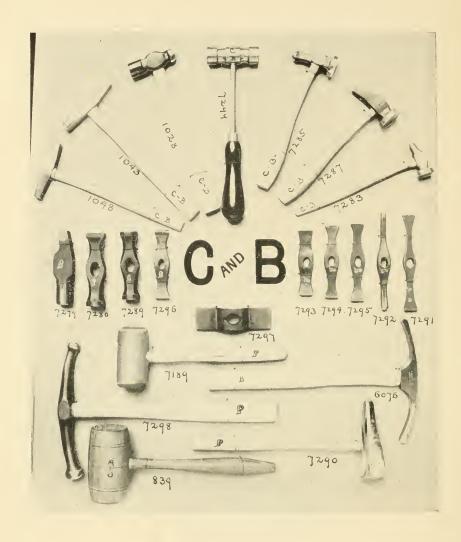
No. 3140. Plain Frame, Nickeled, 8 in. each, \$0.75 " 3145. Extension " 8-12 in. . " 1.00 Blades, 8 in., doz. \$0.50 9 in., doz. \$0.55 10 in., doz. \$0.65 12 in., doz. \$0.80



Anvils No. 8050

Sizes A, B or C, as above.

(Will mail any book published at publishers' prices.)



# HAMMERS AND MALLETS. (For Prices see page 9)

Manual Training needs no apology, as that or Industrial Education is talked of and discussed privately and publicly everywhere. We are an industrial community and our future along these lines must depend largely on the education of the rising generation. Vocational training for the ninety and more per cent who leave school without aim or purpose will meet a long-existing need and is rapidly taking thought and expression among educators and thinking people. For the more artistic side of this class of work Beaten or Worked Metal offers great opportunities for those qualified to take it up.

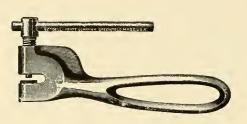
# HAMMERS, MALLETS, ETC.

No.	Face	Article		Price
839	$3\frac{1}{2}$ in	Mallets, Hickory, Large .		each, \$0.30
	$2\frac{1}{2}$ "	" Medium		.20
	3 4	" Small		.12
1026	12 oz	. Hammers, Ball Pein, Polished		.05
1027 1028	10 "	44 64 66 44		" .60 " .55
1028	13 "	" Riveting Cross Pein		" .40
1042	7 "	Kiveting Closs Felli		35
1044	4 "	66 66 66		30
1047	2 "	" Round "		42
1048	3 "	4.4 4.4 4.4		.45
-6076	13 "	" Roughing, Polished .		1.25
7189	1½ "	Mallets, Raw Hide, 1 in. Face .		.21
	0	$1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$ $1\frac{1}{2}$		" .40 .55
7279	10 "	-2	•	" 1.25
7280*	3 in	Hammer, Roughing and Planishing "Planishing,1 sq., 1 rd. Face		" .85
1200	1 4 111	" " " " " " " " " " " " " " " " " " "		" .85
	1 3/16 "	66 66 66 66 66		. " .85
	15 "	44 44 44 44 44		" ,85
7283*	3 "	" Chasing, Soft Face .		.60
	1 "			65
	11 "		0	.70
7285	1	"Finishing with Ball Pein		
	1 1 4 "	66 66 66		.85
	1 3 4	46 66 66 64 64	•	90
	1 1 4 "	64 46 44 44		., .95
7287*	1 "	" Stubb's Chasing Hard Face		.95
	1 1 "	** ** ** **		1.00
	1 3/16 "	64 66 66 66 66		" 1.15
7000	$1\frac{1}{4}$	· · · · · · · · · · · · · · · · · · ·		1.35
7289	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	" Planishing, 2 Rd. Faces		85
	1 2/ 11	44 44 44		.85
	1 16 "	66 66 66		.85
7290	116	Mallets, Horn		., 40
7291	5 "	Hammers, Shaping, Thin. Oval Face		. 1.25
7292	5½ ''	" Round Face .		" 1.25
7293	5 ''	"      "      Oval Face    .		1.25
7294	43 "			1.25
7295	3	44 66 66 66		1.25
7296 7297	*4			" 1.25 " 1.50
7298	14 02	Roughing, 14x3 Face Rounding, ""		" 2.25
7299	4 "	Mallets, Brass, 9-16x1\frac{3}{4} in.		.35
(4/)	8 "	$\frac{3}{4}$ $\frac{3}{4}$ $\frac{7}{4}$ $\frac{11}{4}$ $\frac{11}$ $\frac{11}{4}$ $\frac{11}{4}$ $\frac{11}{4}$ $\frac{11}{4}$ $\frac{11}{4}$ $11$		.45
	16 ''	" 1x3 "		.80
7305*	1 1b			.80
	$1\frac{1}{2}$ "	11 11 11 11 11 11 11		1.00
	2 "	$\frac{1}{3}$		1.20
	4 ''	2*		" 1.75

All Hammers are Handled.

(Copper Work by A. F. Rose.)

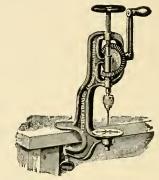
<sup>\*</sup> Not illustrated.



#### PUNCH FOR LIGHT WORK

No. 3150.

Price, each, \$0.50

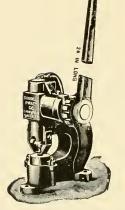


# BENCH DRILL, NO. 308

This is a substantial small machine, with Iron Frame, Cut Gears, Steel Feed Screw, and Adjustable Table, all well made and nicely fitted. It is furnished complete with a Three-Jawed Chuck, capacity 0 to ‡

in. The height from the table to the feed wheel is 13 in.

Price, each, \$4.00



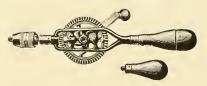
# BENCH PUNCH NO. 3233

This bench punch is strong enough and heavy enough to punch  $\frac{3}{8}$ -in, hole in soft steel or iron,

 $\frac{1}{8}$  of an inch thick, 4 in. from edge. It is furnished complete, as shown in cut, with one set of Dies for  $\frac{3}{8}$ -in. round hole.

Length of Lever, 26 in.

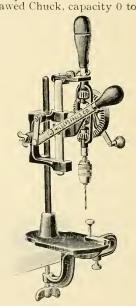
Price, each, with one set \(\frac{3}{8}\)-in. round dies \(\frac{\$15.00}{}\)



#### HAND DRILL NO. 395

These Drills are provided with Chucks having three jaws, resting in solid sockets. There are no springs to get out of place or out of order. The chucks are nickeled and the handles Cocobola. They hold drills from 0 to 3-16 in. Length over all, 11½ in.; weight, 20 oz.

Price, each, \$1.30



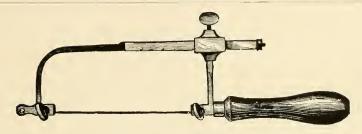
#### DRILL HOLDER NO. 380

The feed is supplied by a compound lever which is convenient, sensitive and effective.

The distance between the chuck and table when Hand Drill No. 395 is used at highest point, is 7½ in. Weight, 7½ lbs.; height, over all, from table, 15½ in.

Price, Holder only . . \$1.50 "and Drill 2.75

(Market Prices on Brass and Copper.)



# METAL SAW FRAME NO. 497

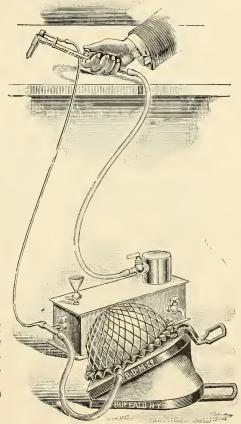
								 -			
No. 497.	Metal	Saw	Frame	, cuts	2 i	n. i	n depth		- Price	e, each,	\$0.50
" 498.	6.6	4.4	4.4	4.4	3 '	•	47		4.6	4.4	.65
1,0,			4.4				4.4		4.6	4.4	.75
		4.4	4.4	6.6	ŝ	4.4	4+		6.6	4.6	.80
			4.6				4.4			6.6	
Blue Lab	el Saws	, per	gross,	\$0.65						per doz.	, .10



# FOOT BELLOWS NO. 9015

This is the newest as well as one of the best finished Bellows put on the market. A moderately fast movement keeps the rubber bag fully inflated with Blow Pipe in operation.

Price, \$5.00



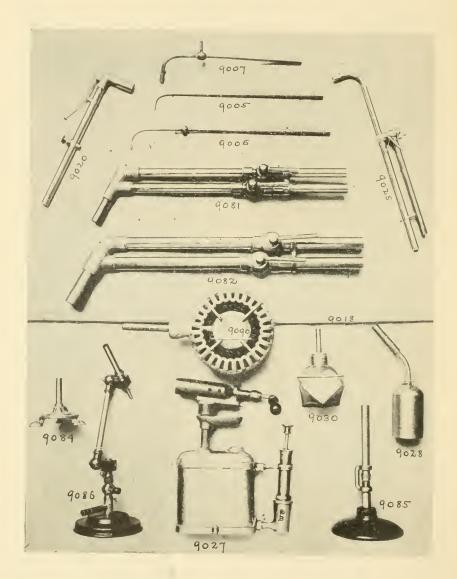
BLOW PIPE AND GENERATOR No. 8091

for use with gasoline when gas is not available.

Price, per set, \$13.50

(For Rubber Tubing and Price, see page 13.)

# BLOW PIPES

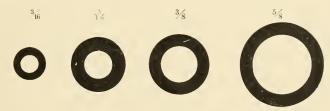


Any system of education must have work in the shaping of material to give it effectiveness.

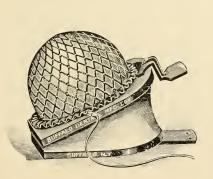
Effectiveness with which one is able to say things is changed by the very education that comes in shaping material, or *doing* things.

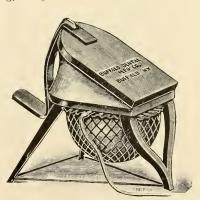
(Arts, Crafts for Beginners by Sandford, each. \$1.20)

No.	Size		Articl	e						Price
8090		Blow Pipe, I	oot Bello	ws and	Genera	tor			S:	13.50
9000		Foot Bellow	s, 74x 9,	9-in. I	Rubber	Disc				4.00
9001		Foot Bellow	10 x11.	12 "	4.6					5.50
9005	8-in.									.12
, , , ,	10 "	Blow Fipe,								.15
	12 "	6.6 6.6								.20
9006	1 44		vith Bulb	alaanar						.25
9007			nouth fun	creamer						.35
		10 to 10 11	nouth for	gas						
9010		Foot Bellow	s, / ±x 9,	9-in. L	ASC .					5.00
9011			10x11,	12 "	··.					6.25
9018	3-16 in. 5-16 "	Rubber Tub	ing, Red C	orrugat	ted mad	de from	pure	stock,	per ft	12
				6.6				6.6		()
	3/8 in. 5/4 ''		6.6				6.6		4.4	.23
9020	8	Blow Pipe fo	r Gas or G	acoline	enecify	r for w	nich			2.00
9022			gulated by							1.75
9025		" " D	guiated by	grip o	manu,	пости	151140	eu.		3.00
		T 1 C 1	1. Menolie	SFatt	2111		•			
9027		Torch Gasol:								3.50
9028			ol, '' Imp '						ng	1.50
9030		Alcoholic La	mp, "Sin	iplicity						.75
9080	7-16 in.	Blow Pipe fo	r Gas, 🗄 in	., Air fo	r 🕏 in. (	Jas Tu	bing			1.25
9081	ž ''		" 3-16	, ,, ,	· 1 · ·	6.6	6.4			1.75
9082	1 ''		" 5-16	, ,, ,	3	* *				2.25
9084		Bunsen Burn	ner					,		.25
9085		6.6	Adius	table o	n Iron	Base				1.00
9086		Blow Pipe F	letchers F	Terapat	h Dble	Set				3.75
0000		Con Storm 1	D	Lorupiu	2010					2.73



Actual Size Rubber Tubing, No. 9018



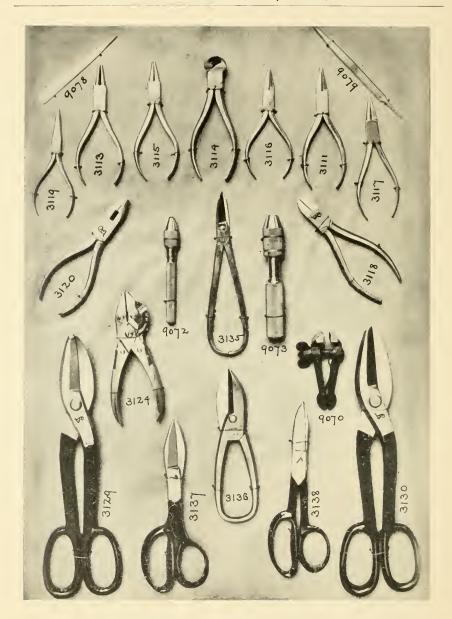


No. 9000 Foot Bellows

No. 9010 Foot Bellows

New Discs and Nets for Foot Bellows furnished separately.

(Special Prices on Class Orders.)



SHEARS AND PLYERS. (For prices, see p. 15)

As work in any line of manual training progresses new models and lines of work are planned and executed by progressive teachers. Any completed work educates the pupils along the greater or motor side of their brain and has great educational value, not always easily explained. A practical and logical explanation to those unfamiliar with the work is to state the fact that from two to five hours per week may be given to manual training to any average class without loss of rank in academic work by the pupils taking the work.

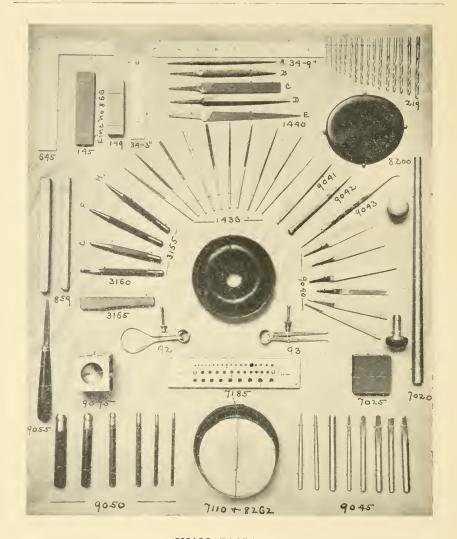
# **PLYFRS**

No.	Size	Article	Price
3111	43-in.	Plvers, polished, flat nose	. \$0.30
	5 ~~~	11 11 11 11	35
	54 "	66 66 66	40
	6 "	16 16 16 16	45
3113	41 "	" round nose	30
0.1.0	5 "	66 66 66	35
	51 "	44 44 44	40
	6 "	66 66 66	45
3114	5 "	" " end cut	60
	51 "	44 46 46 46	65
	6 "		70
3115	5 ''	" nickeled, round nose, smooth jaw .	45
3116	5 ''	" flat " " "	45
3117	5 "	" one flat, one round, smooth	
3118	5 ''	" polished, diagonal cutters .	85
	5½ "	** **	95
3119	5 "	" long nose, round, flat face	38
	5½ ''		45
3120	5 "	" side cutters	65
	6 ''	66 66 66 66	70
	7 ''		90
3124	41/2 "	" nickeled, parallel jaw combination	85
	2 %	4. 4. 4. 4.	1.00
24.00	0 5		1.25
3129	2	Tinners' shears, japanned, curved blade	1.50
	2÷		1.63
3130	3 "		
3130	21 "	" " straight "	1 1 5
	3 "		1.50
	3 <sup>1</sup> / <sub>2</sub> "		2.00
3135	$6\frac{1}{2}$ "	Jewellers' shears, curved blade, nickeled	
3136	5 "	" straight " polished	85
0100	6 "	ii ii ii polisied .	90
	7 ''	44 44 46 46	1.00
	8 "	66 64 64 64	1.10
3137	71 "	Dental " japanned, straight blade	.75
3138	71 "	" curved "	1.25
5022	12 "	Tongs, bent, malleable	35
5024	17		.50
9070	3	Hand Vise, for holding small work	.50
9072	41 "	" " nickeled	1.50
9073	5 <u>1</u> ''	u u u u	1.50
9078	•	Tweezers, polished, plain	.10
9079		" with scriber .	.10



NO. 5022. MALLEABLE TONGS

(Special Prices on Class Orders.)



# SMALL TOOLS

# Student's Set No. 43, Not Illustrated

1 Metal Box, 11x8x5 with lock and 2 keys	1 File, Handled, 1440 B
1 Clamp Vise, 15 in. jaw	1 " " 1440 D
1 Hammer, No. 7283, 1\frac{1}{4} in,	1 " " 1440 E
1 pr. Shears, No. 3130, 2 in.	1 Blow Pipe and Tubing, No. 9007.
1 Metal Saw, No. 498, 3 in.	1 Borax Slate, No. 8230, 3½ in.
1 pr. Dividers, No. 75, 5 in.	1 Cake Borax, No. 8210
1 Pr. Pliers, No. 3111, $4\frac{1}{2}$ in.	1 Cake Tripoli, No. 8212.
1 Pr. Pliers, No. 3119, 5 in.	1 Stone, No. 859, \(\frac{3}{8}\) in.
3 Gravers, No. 9040, Asstd.	2 Pc. Tool Steel for Chasing Tools.
3 Files, No. 1436, 4 <sup>3</sup> in., Asstd.	1 Hand Buff, No. 8240, 1 in.
$3$ " $1436, 6\frac{1}{4}$ " "	Price of Set, \$6.50

(New Patterns of Shades and Utensils Constantly Being Added to Our Stock.)

No.	Size	Article	Price
34	4 in.		Cach, \$0.20
	6 "	66 66 66 66	.25
	9 "		.30
	12 "	16 66 66 66	.40
92	4 ''	Outside Calipers, with solid nut	" .45
	5 "		.48
	6 "	46 64 46 44	.50
93	4 "	Inside " "	" .45
	5 "	66 66 66	" .48
	6 "	46 66 66 66	.50
94		Dividers, with solid nut	" .45
, ,	1 '' 5 ''	ii ii ii ii	" .48
	6 "	44 44 44 44	" .50
219	O	Straight Shank Drills, see page 18	
645	6 "	Steel Square, Flat	" .35
859	1 "	Scotch Stones, 6 in. long . Doz., \$0.75	" .10
000	3 44	" "	.10
	8 1 11		" .12
866	No. 145		" .25
800	" 149	Carborundum Stones, $4x1x\frac{1}{4}$ in., Med $3x1x\frac{1}{4}$ " Fine	" .15
1126			.13
1436	43 in.	Files, Needle, 12 Asstd Shapes in set Doz., \$1.00	
	うき 61 11	1.13	
	01	1.25	" 2=
1440A	+5	Supernne American Swiss, 3 Square .	.23
В	4.5	* Round .	.21
C	글을 ;;	riat, one safe edge	.23
D	$\frac{1}{1}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$	Barette .	.28
Е	5 "	" " Flat, Thin, Tapering	.28

A full line of American and American Swiss Files in all shapes and sizes always in stock.

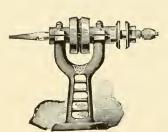
3155A	Punch, very small center	Each, \$0.15
В		" .15
- C	" medium "	.15
$\check{ m D}$	" large "	" .15
F	" cup point, all sizes	" .10
Ĥ	rick, "	" .15
		" .25
3164	Cold Chisels, small, asstd, $\frac{1}{5} - \frac{3}{5}$ in.	
3165	Rivet Sets, for either No. 8, 9, 10, 12 or 14 Rivets	.25
7020	10 in. Ring Mandrels, True Taper Steel, ½ x¼ in.	.50
	12 " " $\frac{7}{5} \times \frac{3}{5}$ ".	" .65
	14 " " " " " " $1\frac{3}{16}x^{\frac{3}{2}}$ ".	" .75
7025	2 "Anvils, Square, Steel block, polished	" 1.30
	$2\frac{1}{2}$ " " " " " " " " " " " " " " " " " " "	" 1.60
	3	" 1.80
	$3\frac{1}{2}$ " " " " " " " " " " " " " " " " " " "	" 2.00
7110	4 "Engravers' Leather Pads Ring	" .55
/110	4 "Engravers' Leather Pads Ring	.60
	6	
74444		.65
7111*	Solid, same price as 7110.	66 1 10
7185	Drill Gauge with Gauge for Taps and Wire .	1.+0
9282A *	Wire and Sheet Metal Gauge, 0-36. See page23	" 2.10
9282B*	" " " 5-35.	" 1.70

<sup>\*</sup>Not Illustrated.

# NO. 219. STRAIGHT SHANK DRILLS

No. of Gauge	Dec. Equiv.	Price Doz.	Price Each	No. of Gauge	Dec. Equiv.		ice Ea.	No. of Gauge	Dec. Equiv.	Pr Doz.	ice Ea.	No of Gauge	Dec. Equiv.	Pri Doz.	
1	.228	\$1.17	\$0.12	16	11-64	\$0.98	\$0.10	31	.120	\$0.70	\$0.07	46	.081	\$0.48	\$0.05
2	.221	1.17	.12	17	.173	.98	.10	32	116	.70	.07	47	5-64	.48	.05
3	.213	1.17	.12	18	.169	.98	.10	33	.113	.70	.07	48	.076	.48	.05
4	.209	1.17	.12	19	.166	.98	.10	34	7-64	.70	.07	49	.073	,48	.05
5	.205	1.17	.12	20	5-32	.98	.10	35	.110	.70	.07	50	.070	.48	.05
6	.204	1.13	.11	21	.159	.88	.09	36	.106	.63	07	51	.067	.48	.05
7	.201	1.13	.11	22	.157	.88	.09	37	.10-1	.63	07	52	1-16	.48	.05
8	.199	1.13	.11	23	.154	.88	.09	38	.101	.63	27	53	.059	.48	.05
9	.196	1.13	.11	24	.152	.88	.09	39	.099	.63	57	54	.055	.48	.05
10	3-16	1.13	.11	25	.149	.88	.09	40	.098	.63	0.7	55	.052	.48	.05
11	.191	1.05	.10	26	.147	.78	.08	41	3-32	.55	.06	56	3-64	.48	.05
12	.189	1.05	.10	27	9-64	.78	.08	42	.093	.55	.06	57	.043	.48	.05
13	.185	1.05	.10	28	.140	.78	.08	43	.089	.55	.06	58	.042	.48	.05
14	.182	1.05	.10	29	.136	.78	.08	44	.086	.55	.06	59	.041	.48	.05
15	.180	1.05	.10	30	1-8	.78	.08	45	.082	.55	.06	60	.040	.48	.05
13	.100	1.03	.10	30	1-0		.00	73	.002		.00	00	.040	.70	.03

A	Set of 36 Drills Nos. 30-65, mtd. in Mahogany Case with cover		\$1.75
В	Full Set of Drills, 1-60, without case	,	3.65
С	One-half Set of Drills, 1-59, odd numbers, without case		2.00



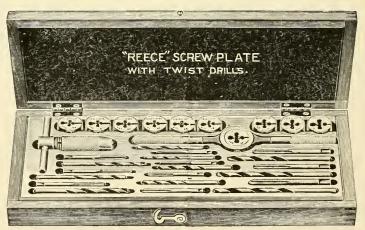
#### POLISHING HEAD, NO. 9223

Solid Iron Frame, 6 in. high; Steel Spindle, 8 in. long, 3-in. diam, Takes  $\frac{3}{4}$  in. Wheel,  $\frac{1}{4}$  in. Belt, Drill  $0 - \frac{5}{3}$ Price, \$2.00

# FOOT WHEEL, NO. 9216

161 in. Diam. Wheel, net weight, Price. \$2.50 25 lbs.





# SCREW PLATE, NO. 221

List of Regular Assortments 1. Cuts 4<sup>36</sup>, 6<sup>32</sup>, 8<sup>32</sup>, 10<sup>24</sup>, 12<sup>24</sup>, machine screw sizes. Morse Twist Drills in-\$6.25

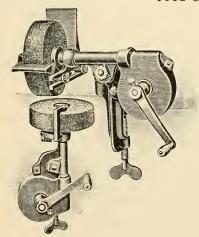
cluded. Price, complete in case

2. Cuts 4<sup>co</sup>, 6<sup>32</sup>, 8<sup>32</sup>, 10<sup>24</sup>, 12<sup>20</sup>, 14<sup>20</sup>, 16<sup>18</sup>, machine screw sizes. Morse Twist Drills included. Price, complete in case

3. Cuts ½ in.<sup>40</sup>, 5-32 in.<sup>32</sup>, 3-16 in.<sup>24</sup>, 7-32 in.<sup>24</sup>, ¼ in.<sup>20</sup>. Fractional sizes. Morse Twist Drills included. Price, complete in case (Market Prices on German Silver, Brass or Copper.)

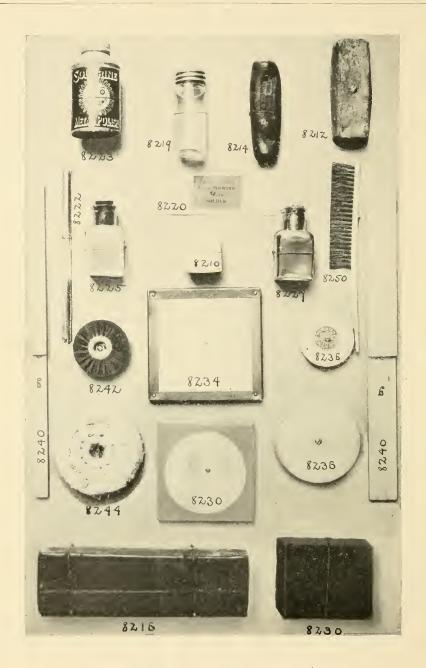
No.	Size	Article	Price			
	(Continued from page 17)					
8200		Enamels, Flux for Copper, per oz.  Colors, except Reds, per oz.	\$9.12			
8218 8260		" Reds,, per oz	.45 .25			
8262		"Bowls Filled, 4 in, \$0.40; 6 in	.60			
8270	21 "	Mortars and Pestles, Agate Each,	1.75 2.25			
8272	3 "	" " Wedgewood . "	4.25			
	3 " 3½ "		.50 .65			
00.10	4 "	a a a a a a a a a a a a a a a a a a a	.75			
9040		Gravers, Set of 5, Handled and Sharpened, 2 Flat, 2 Round, 1 Diamond Point	.85			
9041		Scribers, Nickeled	.20 .20			
9042 9043		" Removable Point	.25 .25			
9045		Chasing Tools (8 in set)	2.00			
9050		Dapping Punches (set of 12)	1.75 2.50			
0055			3.25			
9055 9075		Triangular Scrapers, Handled Each, Dapping Blocks	1.35			
	$\frac{1}{2}$ " $\frac{1}{3}$ "		1.50 1.75			

# TOOL GRINDER, NO. 872



This is the best Grinder we have ever seen for anywhere near the price. It is the only machine made in which every part of the Wheel can be utilized for grinding and polishing. It runs very quietly and with great speed.

Grinder includes Chisel Guide and Tool Rest with Carborundum Wheel,  $5x1\frac{1}{4}$  in. Weight, 10 lbs. Price, \$4.25

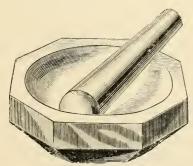


SUPPLIES. (For prices, see page 21.)

New Tools and Supplies are being constantly made, improved or adapted to new purposes. We are alive to new conditions and are usually ahead of the demand.

No.	Size	Article				Price
8210	Prepared	l Borax, per lb., \$0.40	)		Cake	\$0.07
8212	4.6	Tripoli Compound			4-oz. "	.10
	4.4	66			16-oz. "	.12
8214	6.6	Gold Rouge Compor	ind		2- " "	10
8216	6.6	lewelers' Wax .			16 " "	.25
8219	6.1	Lacquer			2 " Bottle	.15
0217	6.6	racefuel			b-pt.	.25
8220	Silver Solder, E	and Elemina			7	1.25
8222	Win. C.1	asy Flowing der for soft soldering		· · · · · · · · · · · · · · · · · · ·	Stick	.07
8223	Davas Da	tiols Colomban Of SO	, per m., 9	1 25 1 104	C. 1 25 . 1 D+	.10
8225		lish, Solarine, Qt., \$0.			. Each.	
	Soldering	g Fluid, soft			. Each,	.15
8227						
8230	$\frac{3\frac{1}{2}}{2}$ in. Borax Sl	ates				.20
	5 11 11					30)
	1					.40
8232		Block for Soldering				.25
8234	Asbestos	14 15 14				.20
8236	2 " Felt Whε	eels, 3 in. thick			- ''	.20
	3 '' '' '	· 1 44 44				30
	4	5 11 11				.50
	5 " " "	·				.75
	6 " "	1			. 64	.95
8240		d Buffs			oz., \$1.00; "	.10
	1 " " "	4.6			1.00	.10
8242	21 " Brush W	heels, soft bristle			6.6	.20
	3 " "	66 66			4.4	.25
	21 "	" stiff "			6.6	20
	2½ " " · · · · · · · · · · · · · · · · ·	44 44 44			4.4	2.5
	4	4 6			6.6	4()
	5 " "	6.6 6.6				50
8244	Rag Whe	els, Muslin, either 3 or	r 4 in			.20
8250	Polishing				6.6	-20
	Pickling	Compound in 10-lb. I	Boves		4.4	1:00
	i ickinig	" " 25 "	11		4.4	2.00
Т	hie Compound in	absolutely harmless.	1 1b 4i	sentroe in	1 mal water	⇒ ()()
1	ins compound is	absortively harmless.	1 10. dr	SOLVES III	gar. water.	

# MORTARS AND PESTLES



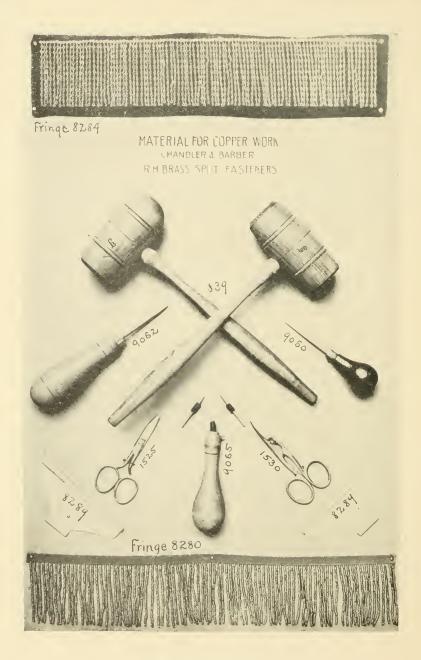




Wedgewood No. 8272

For prices see page 19.

(Market Prices on German Silver, Brass and Copper.)



TOOLS FOR PIERCED BRASS WORK

(Market Prices on Brass and Copper.)

No.	Article	Price
839	Wooden Mallets, L. V.11 in. Face, one end Rounded Hickory both ends Flat	.12
1525 1530	Scissors, Curved Blades, 4½ in	.50
8280	Bead Fringe, 2½ in Yard,	.50
8282 8284	Chain for Making Fringe, 12 yds. in box, Medium Fine Per box,	.22
8289 8290	Folders for bending edge of metal	.20
9060 9062 9065	Awl, tapering gradually from point to handle Each, " abruptly " toward" " made especially for the pierced work. This has fine needle point with rubber guard, which insures holes being of uniform size, furnished with three interchangeable points of assorted	.10
9066	sizes Awl the same as 9065, with one Stationary Point Carbon Paper, 18x24 Tracing Cloth, 30 in. wide Paper,18x24 Sheet, Tandle Shade Holders Patterns or Blue Prints. These are changing from time to time, so it doesn't seem advisable to catalogue them, except in a general way. We have designed for us by two first-class designers Blue Prints of such objects as the schools and individuals are using from time to time. At the present time this includes:	.25 .15 .05 .35 .12 .10
	Candle and Lamp Shades. Lamp Screens, Sconces, Lanterns. Desk Sets, Smoking Sets, Box Corners. Trays, Picture Frames, and many others. Stones in a small Brass Setting with prongs on back for riveting to use on Candle Shades or other light Brass articles	

giving a very pleasing effect. Round and Oval two sizes each shape. Small, each, 10 cents; Large, each, 25 cents.







# SHEET METAL AND WIRE

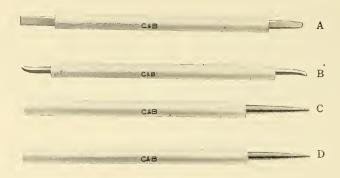
# SURFACE GAUGE WITH 8-in. SPINDLE

# GAUGE

Price, each, \$1.70	Nos.	0-36	Price.	\$2.10
	4.4	5-36	6.4	1.70

(Write for Prices on Patterns and Blue Prints.)

#### LEATHER-WORKING TOOLS



Set No. 8100
Finest steel, rubber covered handles, 6 in. long.
Shapes A, B, C or D . . . . . . . . Set of 4, \$1.00
Other shapes and styles furnished if desired.



Our number 10 Catalogue following our No. 8 is presented after carefully studying conditions, not only for Metal Work in Public Schools but also in the Private Studio and Work Room. We have been most fortunate in having the advice of not only some of the foremost educators in these lines but also Practical Silversmiths and Arts and Crafts Workers in their own Studios. No apology is necessary for Manual Training. It has spread to the uttermost parts of the earth and together with Educational Manual Training, Vocational Manual Training is being recognized as necessary to a proper recognition of American Industrial Supremacy. Our experience of over thirty-five years in dealing in Tools and Hardware and that of over twenty years in specializing for Manual Training has fitted us to know the needs of a large number of Institutions both Public and Private.

We stand ready to advise and recommend equipment which our experience and judgment enable us to do and we invite correspondence, or better still an interview with those about to equip schools or classes. We aim to study conditions as they exist and to recommend what is suitable. Our standing and amount of sales enable us to buy right and we intend that our prices shall be as low as possible, consistent with quality and good service.

In sending orders, remit by any reliable way. We take *no risk*. If you do not do this with order, give us a reliable reference. State address and shipping directions clearly, and use number and description to avoid mistakes.

CHANDLER & BARBER.

Boston, Massachusetts, U. S. A., May 1909,



